

REMARKS

Claims 13-18, 26, 28-30, 32-39, 41, 43-58, and 61-64 are pending. Claims 13, 15, 37, and 39 are in independent form. Reconsideration and withdrawal of the present rejection is respectfully requested.

In the Office action mailed December 1, 2009, claims 15 and 39, and claims dependent therefrom, were rejected under 35 U.S.C. § 102(b) based on U.S. Patent No. 5,732,708 to Nau et al (hereinafter “Nau”).

As amended, claim 15 relates to a method of monitoring a cardiac biological signal using electrocardiographic monitoring instrumentation. The method includes receiving a cardiac biological signal that includes information describing events at the electrocardiographic monitoring instrumentation, determining, at the electrocardiographic monitoring instrumentation, a measure of the merit of information describing each event, comparing, at the electrocardiographic monitoring instrumentation, the measure of merit of information describing each event with a merit criterion, transmitting, for medical purposes, information describing a first proper subset of the events that have one or more measures of merit meeting a merit criterion from the electrocardiographic monitoring instrumentation to a remote medical receiver, and discarding information describing a second proper subset of the events that have one or more measures of merit that fail to meet the merit criterion at the electrocardiographic monitoring instrumentation. The measure of merit of the information describing each event embodies both a severity of a cardiac condition indicated by the information describing the event and an amount of noise in the information describing the event.

Claim 39 relates to an article that includes one or more machine-readable media storing instructions operable to cause one or more machines to perform operations. The operations are related to the activities recited in claim 15.

The rejections of claims 15 and 39 are based on the contentions that Nau inherently “[determines] a merit of the information … based on the information having a certain degree of quality,” since “the quality of the information must be of a quality that is usable by the processor.” *See action mailed December 1, 2009*, page 2, para. 1. In other words, the rejection contends that “if the information is of a quality that is so poor that it cannot be read or used by the processor, then the merit of the information (i.e., whether the information describes an arrhythmic event) will not be able to be determined.” *See id.* (emphasis added).

The rejection thus contends that not being able to determine the merit of information inherently constitutes determining a merit of the information.

Applicant respectfully disagrees. It would appear that an inability to perform a determination would necessarily preclude inherently performing the determination. Indeed, since Nau is not able to determine the merit of the information when the information is of poor quality, it would appear that the recited determination of merit of information is necessarily absent from Nau. Since the recited subject matter is necessarily absent from Nau, it is not “necessarily present” and hence inherency has not been established. *See, e.g., M.P.E.P. § 2112 (citing In re Robertson, 169 F.3d 743, 745 (Fed. Cir. 1999)).*

To ensure that this understanding is shared, claims 15 and 39 have been amended to recite that a measure of merit that embodies both a severity of a cardiac condition and the quality of the information. Further, such a measure of merit is both determined and compared with a merit criterion. Any inherent failure in Nau to determine merit due to poor signal quality will

necessarily not yield a measure of merit that embodies both a severity of the cardiac condition and a quality of the information, much less one that can be compared.

Accordingly, claims 15 and 39 are not anticipated by Nau. Applicant respectfully requests that the rejections of claims 15, 39, and the claims dependent therefrom be withdrawn.

Claims 15 and 39, and claims dependent therefrom, were rejected under 35 U.S.C. §§ 102(a), 102(e) based on U.S. Patent No. 6,589,187 to Dirnberger et al (hereinafter "Dirnberger").

As discussed above, claim 15 relates to a method of monitoring a cardiac biological signal using electrocardiographic monitoring instrumentation that includes determining a measure of merit that embodies both a severity of a cardiac condition indicated by the information describing the event and an amount of noise in the information describing the event, as well as comparing such a measure of merit with a merit criterion.

Dirnberger neither describes nor suggests that such a measure of merit be determined or compared. Indeed, Dirnberger does not appear to acknowledge any impact of noise on the signals received by his implantable devices. This may be related to the implantation of Dirnberger's implantable medical devices in the body, which is a volume conductor.

In any case, Dirnberger neither describes nor suggests determining or comparing such a measure of merit. Accordingly, claims 15 and 39 are not anticipated by Dirnberger. Applicant respectfully requests that the rejections of claims 15, 39, and the claims dependent therefrom be withdrawn.

Claims 13 and 37, and claims dependent therefrom, were rejected under 35 U.S.C. §§ 102(a), 102(e) based on Dirnberger.

As amended, claim 13 relates to a method of monitoring a cardiac biological signal using electrocardiographic monitoring instrumentation. The method includes receiving, at the electrocardiographic monitoring instrumentation, a cardiac biological signal that includes information describing events, classifying the events into two or more categories based on cardiac conditions indicated by the information describing each event, determining a measure of merit of the information describing each event, comparing, at the electrocardiographic monitoring instrumentation, the measure of merit of information describing each event with a first merit criterion, transmitting, for medical purposes, information describing a first proper subset of the events in a first of the categories that have one or more measures of merit meeting [[a]] the first merit criterion from the electrocardiographic monitoring instrumentation to a remote medical receiver, wherein the remote medical receiver is located at a different site from the electrocardiographic monitoring instrumentation, at the electrocardiographic monitoring instrumentation, discarding information describing a second proper subset of the events in the first of the categories that have one or more measures of merit that fail to meet the first merit criterion, comparing, at the electrocardiographic monitoring instrumentation, the measure of merit of information describing each event with a second merit criterion, transmitting, for medical purposes, information describing a third proper subset of the events in a second of the categories that have one or more measures of merit meeting the second merit criterion from the electrocardiographic monitoring instrumentation to the remote medical receiver, wherein the second category differs from the first category and the second merit criterion differs from the first merit criterion; and at the electrocardiographic monitoring instrumentation, discarding information describing a fourth proper subset of the events in the second of the categories that have one or more measures of merit that fail to meet the second merit criterion. The measure of

merit embodies a severity of the cardiac condition associated with the event and a quality of the information describing the event.

Claim 37 relates to an article that includes one or more machine-readable media storing instructions operable to cause one or more machines to perform operations. The operations are related to the activities recited in claim 13.

As discussed above, Dirnberger neither describes nor suggests determining or comparing such a measure of merit. Accordingly, claims 13 and 37 are not anticipated by Dirnberger. Applicant respectfully requests that the rejections of claims 13, 37, and the claims dependent therefrom be withdrawn.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

This response is accompanied by a request for continued examination. Please apply the one-month extension of time fee and the fee for the request for continued examination, along with any other charges or credits, to deposit account 06-1050.

Respectfully submitted,

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for


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